

San Luis Obispo County Proposition 1E Proposal Budget

This attachment provides detailed budget documentation supporting the San Luis Obispo County Proposition 1E Proposal costs shown in Table 4-1, Budget (Proposition 1E PSP Exhibit B – Table 6). In addition, a detailed estimate and basis of costs that supports the project budget is included. The budget is based on the latest project documentation and 30 percent design plans as described in the completed work items and tasks in Attachment 3. Each task and budget category shown in the table agrees with Attachment 3 Work Plan and Attachment 5 Schedule.

The funding match for the Proposal is 50% as shown in Table 4-1. All non-state share funds (matching funds) are costs incurred after September 30, 2008 and are from the Proposition 218 assessment funds collected from Zone 1/1A landowners benefiting from the project.

Table 4-2 summarizes the total proposal budget by Work Plan tasks. All relevant labor code compliance requirements and the applicable prevailing wage laws were considered in developing the Budget.

**Table 4-1 Detailed Project Budget for
Flood Control Zone 1/1A Alternative 3a**
(PSP Exhibit B Table 6 – Budget, 2009 dollars)

San Luis Obispo County Proposition 1E Proposal Flood Control Zone 1/1A Alternative 3a						
Budget Category	Other State Funds	Non-State Share	Requested Grant Funding	Total	Percent Funding Match	
(a) Project Administration Costs	\$0	\$245,000	\$0	\$245,000		
(b) Land Purchase/ Easement	\$0	\$286,250	\$0	\$286,250		
(c) Planning/ Design/ Engineering/ Environmental Documentation	\$0	\$738,519	\$0	\$738,519		
(d) Construction/ Implementation	\$0	\$385,000	\$2,012,000	\$2,397,000		
(e) Environmental Compliance/ Mitigation/ Enhancement	\$0	\$274,200	\$785,000	\$1,059,200		
(f) Construction Administration	\$0	\$427,000	\$0	\$427,000		
(g) Other Costs	\$0	\$20,000	\$0	\$20,000		
(h) Construction/ Implementation Contingency	\$0	\$474,400	\$0	\$474,400		
(i) Grand Total	\$0	\$2,850,369	\$2,797,000	\$5,647,369		
(j)	Calculation of Funding Match %				50.5%	
Sources of Funds for Non-State Share (Funding Match) and Other State Funds		<i>\$199,200 Proposition 218 revenues collected from landowners within benefit assessment area. Proposition 218 revenues will be used to fund debt service on proposed USDA Community Facilities Low Interest Loan.</i>				

**Table 4-2 Project Budget for
Flood Control Zone 1/1A – Alternative 3a
by Work Plan Tasks**

Task	Budget Category	Total
Task 1	Project Administration (a)	
Task 1a	<i>Project Management</i>	\$180,000
Task 1b	<i>Labor Compliance Program</i>	\$0
Task 1c	<i>Project Performance Monitoring Plan</i>	\$25,000
Task 1d	<i>Securing of USDA Loan</i>	\$40,000
Task 2	Land Acquisition (b)	\$286, 250
Task 3	Planning/Design/Engineering/Environmental Documentation (c)	
Task 3a	<i>Planning / Environmental Documentation</i>	\$508,519
Task 3b	<i>Design / Engineering</i>	\$230,000
Task 4	Construction/ Implementation (d)	
Task 4a	<i>Construction Contracting</i>	\$25,000
Task 4b	<i>Construction</i>	
	<i>Vegetation Management</i>	\$360,000
	<i>Sediment Removal</i>	\$1,205,000
	<i>Levee Raise</i>	\$807,000
Task 5	Environmental Compliance/ Mitigation/ Enhancement (e)	
Task 5a	<i>Environmental Compliance – Permitting and Monitoring</i>	\$274,200
Task 5b	<i>Environmental Mitigation</i>	\$785,000
Task 6	Construction Management (f)	\$427,000
Task 7	Other Tasks – Data Management and Monitoring Deliverables (g)	\$20,000
	Construction/ Implementation Contingency (h)	\$474,400
	Grand Total	\$5,647,369

Basis of Detailed Budget Cost Estimates

The following sections provide additional detail about the categories identified in Tables 4-1 and 4-2.

Task 1: Project Administration (a)

In general, Project Administration for the Zone 1/1A project is estimated to require approximately 40 hours per month of a senior level District engineer for the 36 month duration of the project. The project administration task is anticipated to begin in September 2011 and be completed September 2014. The total cost for Project Administration is estimated to be \$245,000 and includes budget for completing Tasks 1a, 1b, 1c, and 1d as described below:

Task 1a Project Management includes necessary expenses incidental to the project for project management and includes an allocation of overhead that is assigned to all projects completed by the District. Task 1 is estimated to be \$180,000, and includes the cost for project coordination estimated at 40 hours per month by a senior level District engineer at a rate of \$125 per hour for the 36 month duration of the project.

Task 1b Labor Compliance Program is administered by the County Public Works Construction Manager. The Construction Manager reviews contractor's payroll submittals for labor compliance with the State labor code. Costs for the Labor Compliance Program are included in the cost estimate for Construction Management in Task 6, Construction Administration. No additional/separate expenditures are anticipated under Task 1.

Task 1c Project Performance Monitoring Plan will be prepared at the initiation of implementation to outline how the project performance will be assessed and evaluated as summarized in Attachment 6. The estimated cost to prepare the PPMP is \$25,000 and includes 200 hours at a staff rate of \$125 per hour.

Task 1d Securing of USDA Loan. In order to meet matching fund requirements of 50% for Proposition 1E, Zone 1/1a will proceed with obtaining a low interest loan through the USDA's Community Facilities Direct and Guaranteed Loan Program. This task involves all work activities associated with the USDA loan program, including preparation of loan pre-application, preparation of loan application, preparation of loan documents and agreements (if funding is successful), and administration and compliance with loan requirements (if funding is successful), as described in the task section of Attachment 3. The estimated cost for this task is \$40,000 and is based on costs incurred by the District on two previous successful USDA loan applications.

Project administration costs in Tasks 1 are not a part of the requested grant funding and are submitted for consideration as matching funds. Other administrative costs are included within the other budget categories as part of the staff time required to complete the designated work.

It is anticipated that the District will fund the work in this task through a USDA Community Facilities loan, as described in Task 1d. Interim costs prior to securing a USDA loan would come from a loan from the District's general fund. Flood Control Zone 1/1A Proposition 218 revenues will be used to fund debt service on proposed USDA Community Facilities and/or District General Fund Loans.

Task 2: Land Acquisition (b)

Land acquisition is estimated to be \$286,250 and is the anticipated cost to obtain necessary temporary and permanent construction easements for the flood control project. The District has easements over private property to construct, maintain, and inspect the Zone 1/1A Flood Control Channel facilities and appurtenant structures. However, it is expected that additional temporary construction and permanent maintenance easements will be required to perform the proposed construction and future maintenance in an efficient manner.

Approximately 10 acres of temporary construction easements are anticipated to be needed for stockpiling, equipment storage, and equipment mobilization through the project area. The per acre cost for farm land in the local area is approximately \$34,780 based on an existing agricultural land sales list advertising an asking price of \$795,000 for 22.86 acres in Arroyo Grande, land which is currently used to grow various fruits and vegetables (See Exhibit CC – Oceano Real Estate). The \$34,780 per acre land value was adjusted to obtain a rental value by

applying a discount factor of 10% per annum, resulting in approximately \$3,500 per acre rental cost that can be used in estimating the cost for acquiring the anticipated temporary construction easement(s).

Approximately 2 acres of permanent easements may be required to provide permanent access for maintenance of the levee slope. In a number of locations, the proposed toe of slope for the levee raise portion of work extends to the existing easement boundary or just beyond it and will require acquisition of additional permanent easement to provide a minimum 10 foot access at the new toe of slope. The number of easements required will be determined in conjunction with final design plans.

Property appraisals, easement document preparation, and property owner correspondence will be completed by County staff. Property owner correspondence is expected to be a large effort since, in addition to easement acquisition, there are a number of known encroachments within the Arroyo Grande Creek Channel easement that were identified on the 30% design plans. These encroachments may or may not be allowed to remain and thus will require coordination and cooperation from the various property owners with encroachments along the flood control channel.

The following table summarizes the assumptions used to develop the estimate for the temporary and permanent construction easements:

Description	Unit Cost	Quantity	Units	Cost (2009\$)
Land Purchase / Easement				
1 Year Temporary Construction Easement	\$3,500	10	Acre	\$35,000
Permanent Maintenance Easement	\$35,000	2	Acre	\$70,000
Property Appraisals	\$2,500	20	Each	\$50,000
Easement Document Preparation	\$5,000	20	Each	\$100,000
Property Owner Correspondence	\$125	250	Hours	\$31,250
Total				\$286,250

Assumptions:

- Property Appraisal budget estimate based on work effort requiring 20 staff hours per appraisal at a staff rate of \$125 per hour (\$2,500/appraisal).
- Easement Document Preparation budget estimate based on work effort requiring 40 staff hours per easement at a staff rate of \$125 per hour (\$5,000/easement).
- Property Owner Correspondence budget estimate based on work effort requiring 10 staff hours or less per proposed easements (10 hours x 20 proposals = 200 hours) and 50 staff hours to coordinate with property owner(s) who have encroachments within the flood control channel easement.

Land Acquisition costs in Task 2 are not a part of the requested grant funding and are submitted for consideration as matching funds. It is anticipated that the District will fund the work in this task through a USDA Community Facilities loan. Interim costs prior to securing a USDA loan would come from a loan from the District's general fund. Flood Control Zone 1/1A Proposition 218 revenues will be used to fund debt service on proposed USDA Community Facilities and/or District General Fund Loans.

Task 3: Planning/ Design/ Engineering/ Environmental Documentation (c)

Task 3a including planning, environmental documentation, and 30% design are complete as described in the Completed Work section of Attachment 3 and is considered a significant milestone for the Alternative 3a Project. The completion of this initial phase of the project was funded by Proposition 218 funds collected from landowners within the Zone 1 and 1A benefit assessment area. Work on this phase of the project initiated on June 8, 2008, when the District approved the contract with Morro Group / SWCA for \$509,971 to prepare the Zone 1/1A Waterway Management Program and Environmental Impact Report. The Waterway Management Program was adopted and its

Environmental Impact Report was certified by the Flood Control District on November 2, 2010. The total cost to complete the WMP and EIR, including two amendments to the contract, was \$528,583. In addition, to support the preparation of the WMP and EIR a preliminary geotechnical report was completed by a consultant at a cost of \$25,000 as well as a record boundary survey and topographic survey at a cost of \$47,500. The geotechnical report and surveys were necessary to develop the 30% design plans. The total cost of this initial and necessary phase of the project was \$605,583.

An amount totaling \$97,064 was spent prior to September 30, 2008 (See Exhibit VV – Consultant Invoice Period Ending Sep. 27, 2008) and therefore was subtracted from the total cost of this task. An amount totaling \$508,519 was funded through special assessment revenues collected from the landowners within Flood Control Zone 1/1A and is included herein for consideration as part of this proposal's funding match.

Task 3b involves design work to bring the 30% design to 100% design remains to be completed under this task. The following paragraphs summarize the assumptions used to develop the estimate for design based on Public Works staff estimates to complete project design, consultant contracts, and consultant estimates.

This task involves completing a topographic survey, updating the existing hydraulic model, completion of design geotechnical report, and preparation of construction documents for the project including plans, specifications, and estimates as described in Attachment 3 Workplan. The estimated costs are based on consultant estimates and are within the range of standard percentage of construction costs typically allocated for design.

The topographic survey to update existing creek channel cross sections for areas appropriate for sediment removal, installation of log structures, and to determine quantities of sediment to be removed will be initiated in July 2011 and completed prior to the grant award date. This project activity is estimated to cost approximately \$15,000 and is based on the actual cost (\$12,440) for the original topographic survey work completed in 2008 for Task 3a. The consultant's fee schedule is attached as Exhibit DD. This cost is included for consideration as matching funds.

The update of the hydraulic model will be initiated and completed with the topographic survey described above. Updating the hydraulic model is estimated at \$15,000 and is based on the consultant's anticipated work effort of approximately 125 hours of a Principal Engineer at a rate of \$120 per hour. The anticipated work includes review of the existing hydraulic model, revising channel roughness coefficient (n) to match existing conditions, revise channel cross sections to match existing conditions, run updated model and determine sediment removal locations, run updated model for Alternative 3a proposed conditions and determine locations for implementing mitigation measures in EIR for erosion and sedimentation due to channel overtopping, and prepare technical memorandum of findings. This cost is included for consideration as matching funds.

Final geotechnical evaluation is estimated at \$125,000 and is based on a budget level cost estimate from the consultant who prepared the initial geotechnical evaluation (Exhibit EE). The design geotechnical evaluation would include explorations along both sides of the creek, evaluation of slope stability, seepage, liquefaction, seismic settlement, and lateral spreading and their potential impact on the design. In addition, the project will involve ground improvement below the levee and flood walls that may require alternatives to reduce impacts to environmentally sensitive areas or easement.

The cost to complete the 100% Construction Drawings for the entire Alternative 3a project which includes vegetation and sediment management and a levee raise, is estimated at \$75,000 and is based on the consultant's anticipated work effort. The consultant estimates that the vegetation and sediment management plans can be completed for \$20,000 and that the 3a levee raise plans, including incorporation of mitigation measures in EIR for erosion and sedimentation due to channel overtopping, could be completed for \$35,000. Depending on the results of the final geotechnical evaluation, the 3a levee raise design could get more complicated and therefore an additional \$20,000 was included to address any unforeseen conditions that may come up.

The following table summarizes the estimate for Task 3b:

Description	Unit Cost	Quantity	Units	Cost (2009\$)
Task 3b Design				
Topographic Survey	\$15,000	1	LS	\$15,000
Update Hydraulic Model	\$15,000	1	LS	\$15,000
Final Geotechnical Evaluation		1	LS	\$125,000
100% Construction Drawings	\$ 75,000	1	LS	\$75,000
Total				\$230,000

Task 3 Planning/Design/Engineering/Environmental Documentation Total

Description	Cost (2009\$)
Task 3a Planning/Environmental Documentation	\$ 508,519
Task 3b Design/Engineering	\$230,000
Total	\$738,519

Project planning, design, engineering and environmental documentation costs in Task 3 are not a part of the requested grant funding and are submitted for consideration as matching funds. It is anticipated that the District will fund the work in this task through a USDA Community Facilities loan. Interim costs prior to securing a USDA loan would come from a loan from the District's general fund. Flood Control Zone 1/1A Proposition 218 revenues will be used to fund debt service on proposed USDA Community Facilities and/or District General Fund Loans.

Task 4: Construction/ Implementation (d)

Task 4a Construction Contracting includes the cost to advertise, conduct pre-bid meeting, evaluate bids and award the construction contract for the Alternative 3a Project and is estimated to be \$25,000 and provides adequate budget for approximately 200 staff hours at a rate of \$125 per hour. The anticipated work effort estimation of 200 hours is consistent with similar completed County projects.

Construction contracting costs in Task 4a are not a part of the requested grant funding and are submitted for consideration as matching funds. It is anticipated that the District will fund the work in this task through a USDA Community Facilities loan. Interim costs prior to securing a USDA loan would come from a loan from the District's general fund. Flood Control Zone 1/1A Proposition 218 revenues will be used to fund debt service on proposed USDA Community Facilities and/or District General Fund Loans.

Task 4b Construction of the Alternative 3a Project cost estimate is summarized in the tables below. The cost estimates for the 3 components, First Year Vegetation Management, First Year Sediment Management and Alternative 3a Levee Raise, are based on the 30 percent design, in accordance with the standard estimating guidelines in the County Project Management Manual for Public Works projects and the construction cost estimates for various items prepared by consultants.

Task 4b First Year Vegetation Management

Description	Unit Cost	Quantity	Units	Cost (2009\$)
Task 4b First Year Vegetation Management				
Vegetation Trimming	\$4,000	30	Acre	\$120,000
Tree Removal	\$7,200	30	Acre	\$216,000
Non-Native Invasives Removal	\$500	30	Acre	\$15,000
Tree Planting	\$40	225	(1) Tree	\$9,000
Total				\$360,000

Assumptions:

- Vegetation trimming unit cost based on the second highest contractor bid received during 2010 Vegetation Thinning, Invitation to Bid #3493-10 (Exhibit WW).
- Tree removal unit cost based on assumption that approximately 24 trees would be removed per acre at a cost of \$300 per tree from San Luis Obispo County Public Works Bonding Estimate, Approved Unit Costs 2009 (See Exhibit FF).
- Non-Native Invasives Removal unit cost based on expense of \$950 incurred for a change order during 2010 Vegetation Thinning to add invasive removal and herbicide treatment at one location; assumed \$500 per acre as an average cost since non-native invasives are not prevalent in all areas.
- Tree planting unit cost includes cost for tree (1-gallon size), labor to plant, water and mulch, if needed. Cost is consistent with similar completed County projects and is based on planting of at least 100 trees. Cost was obtained from personal communication with San Luis Obispo County Public Works Environmental Restoration Specialist who is responsible for vegetation restoration on all County projects.

Implementation of the 1st year vegetation management costs in Task 4b (\$360,000) are not a part of the requested grant funding and are submitted for consideration as matching funds. It is anticipated that the District will fund the work in this task through a USDA Community Facilities loan. Interim costs prior to securing a USDA loan would come from a loan from the District's general fund. Flood Control Zone 1/1A Proposition 218 revenues will be used to fund debt service on proposed USDA Community Facilities and/or District General Fund Loans.

Task 4b First Year Sediment Removal

Description	Unit Cost	Quantity	Units	Cost (2009\$)
Task 4b First Year Sediment Removal				
Clear and Grub	\$1,300	13	Acre	\$16,900
Sediment Removal	\$9	21,332	CY	\$192,000
Sediment Transport/Disposal	\$29	21,332	CY	\$618,600
Habitat Enhancement (Log Structures)	\$377,400	1	LS	\$377,400
Total				\$1,205,000

*Total rounded to the nearest thousand.

Assumptions:

- Clear and Grub unit cost is from *San Luis Obispo County Public Works Bonding Estimate, Approved Unit Cost 2009*, for "Clearing and Grubbing" (\$0.03/SF).
- Sediment removal unit cost is from *San Luis Obispo County Public Works Bonding Estimate, Approved Unit Cost 2009*, for "Cut & Fill" of material greater than 20,000 cubic yards.
- Sediment transport/disposal unit cost is from *San Luis Obispo County Public Works Bonding Estimate, Approved Unit Cost 2009*, for "Disposal of Class 3 Base".
- Habitat enhancement lump sum cost is from the Engineer's Estimate of Probable Construction Cost based on conceptual drawings (30% design) prepared by Waterways Consulting, Inc., dated September 15, 2009.

Task 4b Alternative 3a Levee Raise

Description	Unit Cost	Quantity	Units	Cost (2009\$)
Task 4b Alternative 3a Levee Raise				
Clear and Grub (Levee footprints)	\$1,300	9	Acre	\$11,700
Levee Raise (imported material)	\$36	14,100	CY	\$507,600
Retaining Walls (average height 5 feet)	\$200	361	LF	\$72,200
Drainage and Utility Modifications	\$16,160	1	LS	\$16,160
Erosion and Sediment Control	\$179,340	1	LS	\$179,340
Construction Staking and Surveying	\$20,000	1	LS	\$20,000
Total				\$807,000

*Total rounded to the nearest thousand.

Assumptions:

- Clear and Grub unit cost is from *San Luis Obispo County Public Works Bonding Estimate, Approved Unit Cost 2009*, for “Clearing and Grubbing” (\$0.03/SF).
- All other line items and costs are from the Engineer’s Estimate of Probable Construction Cost based on conceptual drawings (30% design) prepared by Waterways Consulting, Inc., dated September 15, 2009.

Task 4b Construction Total

Description	Cost (2009\$)
First Year Vegetation Management	\$360,000
First Year Sediment Removal	\$1,205,000
Alternative 3a Levee Raise	\$807,000
Total	\$2,372,000

*Total rounded to the nearest thousand.

Grant funding is being requested to implement the first year sediment removal and Alternative 3a levee raise portions of this project. The total amount of grant funding being requested for Task 4b is \$2,012,000.

Task 5 Environmental Compliance/ Mitigation/ Enhancement (e)

Task 5a Environmental Compliance costs are associated with permitting and environmental monitoring during construction. The Permitting work has been initiated. No grant funding is being requested for this task. The total amount of this task is \$274,200 and is submitted for consideration as matching funds. It is anticipated that the District will fund the work in this task through a USDA Community Facilities loan. Interim costs prior to securing a USDA loan would come from a loan from the District’s general fund. Flood Control Zone 1/1A Proposition 218 revenues will be used to fund debt service on proposed USDA Community Facilities and/or District General Fund Loans.

The cost of obtaining permits from regulatory agencies for the Alternative 3a Project is \$29,500 based on the consultant estimate (see Exhibit GG). The total amount estimated for Permitting is \$37,000 which includes the consultant estimate and approximately 60 hours of Public Works staff time to oversee this task.

Task 5a Environmental Compliance - Permitting

Description	Unit Cost	Quantity	Units	Cost (2009\$)
Permitting				
Permitting by Consultants	\$29,500	1	each	\$29,500
Environmental Resource Specialist	\$125	60	Hours	\$7,500
Total				\$37,000

Task 5a Environmental Compliance - Monitoring

Description	Unit Cost	Quantity	Units	Cost (2009\$)
Environmental Compliance	\$2,372,000	10	percent	\$237,200
Total				\$237,200

The environmental monitoring cost estimate is based on 10% of the \$2,372,000 raw construction cost (without contingency). This assumption is consistent with similar projects implemented by the County.

Task 5a Environmental Compliance Total

Description	Cost (2009\$)
Permitting	\$37,000
Environmental Compliance	\$237,200
Total	\$274,200

Environmental compliance costs in Task 5a (\$274,200) are not a part of the requested grant funding and are submitted for consideration as matching funds.

Task 5b Environmental Mitigation costs are associated with identified mitigation measures per the Environmental Impact Report that was certified by the District on November 2, 2010. Timing on the implementation of the mitigation will be permit driven and may involve enhancement of the habitat within the channel, consistent with the adopted WMP and proposed project. Required mitigation per the permits and EIR will be incorporated into the final construction drawings to be completed during Task 3b. Therefore, implementation costs for most of the required habitat enhancement / mitigation are included in the construction implementation costs of Task 4b (i.e., Habitat Enhancement (log structures), Erosion and Sedimentation Controls). However, implementation of the required mitigation measures in the EIR for erosion and sedimentation due to channel overtopping has a significant cost and therefore was not included in the construction implementation costs of Task 4b. The implementation costs of the project's environmental mitigation for erosion and sedimentation due to channel overtopping during the 11th year storm are summarized in the table below:

Task 5b Environmental Mitigation

Description	Unit Cost	Quantity	Units	Cost (2009\$)
Erosion and Sedimentation BMP's due to Channel Overtopping	\$785,000	1	LS	\$785,000
Total				\$785,000

Lump sum cost for environmental mitigation includes \$785,000 for installation of a permanent best management practices (BMP's) on the south levee to mitigate erosion damage that would occur from overtopping during the 11th year storm (any storm greater than the 10-year event). Approximate mitigation area is assumed to be 8,700 SY; based on a levee length of 1,565 feet calculated by Waterways and is the total length of levee over 3 locations where the south levee would overtop in its current condition (2009 condition) and an assumed levee slope length of 50 feet (includes the levee top width and outside slope length). Proposed BMP's assumed to be of Armorflex 9-inch block at an installation cost of \$90 per square yard quoted by Contech via phone conversation on October 14, 2010.

Grant funding is requested for Task 5b, Environmental Mitigation.

Task 6 Construction Management (f)

The cost to administer construction of the Alternative 3a project, including engineering services during construction, is estimated to be 18 percent of the \$2,372,000 raw construction cost (without contingency) and was calculated in accordance with the County of San Luis Obispo Public Works Department Project Management Manual. Typical mark-up for construction management for projects over \$200,000 is between 15% and 20% (see Exhibit HH). The cost for Construction Management is estimated at \$427,000.

Construction management costs in Task 6 are not a part of the requested grant funding and are submitted for consideration as matching funds. It is anticipated that the District will fund the work in this task through a USDA Community Facilities loan. Interim costs prior to securing a USDA loan would come from a loan from the District's general fund. Flood Control Zone 1/1A Proposition 218 revenues will be used to fund debt service on proposed USDA Community Facilities and/or District General Fund Loans.

Task 7 Other Costs - Data Management and Monitoring Deliverables (g)

This task involves the integration of water quality data collected from the project into the County's Data Management System for transmittance to State data programs such as the Water Data Library, Surface Water Ambient Monitoring Program, California Environmental Information Catalog, Integrated Water Resources Information System, and California Environmental Resources Evaluation System.

This task is estimated to cost approximately \$20,000 and includes 160 hours of staff time (16 hours per year for the 10 monitoring period post construction) for a senior engineer at a rate of \$125 per hour.

Construction/ Implementation Contingency (h)

The construction contingency is estimated to be 20% of the raw capital costs (not including project management, overhead, or operations). A contingency is included to account for unforeseen conditions. In accordance with the San Luis Obispo County Public Works Project Management Manual, typical contingency factors range from 10% to 50%, with the upper end for use on initial cost estimates (Exhibit II). Since the construction cost is based on the 30% design plans, a larger contingency in the range of 25% would be warranted. The District, however, is confident in the cost estimates provided, which were based on the latest project documentation, and therefore assumed a contingency amount of 20% or \$474,400, is adequate. All of this cost is submitted for consideration as matching funds.

It is anticipated that the District will fund the work in this task through a USDA Community Facilities loan. Interim costs prior to securing a USDA loan would come from a loan from the District's general fund. Flood Control Zone

1/1A Proposition 218 revenues will be used to fund debt service on proposed USDA Community Facilities and/or District General Fund Loans.

EXHIBIT CC



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Arroyo Grande, CA
This opportunity is being used to grow a variety of fruits and vegetables to supplement the areas... | \$795,000
22.86 AC
Agricultural |
| <input type="checkbox"/> |  | rainbowranch
Arroyo Grande, CA
Gated Ocean View Ranch Estate within 10 minutes of the Village of Arroyo Grande and 20 minutes of... | \$5,500,000
200 AC
Pasture/Ranch |
| <input type="checkbox"/> |  | 2275 Branch Mill Road
Arroyo Grande, CA
East Arroyo Grande Valley location. Currently used for crops. Hugh potential. Two legal parcels... | \$1,575,000
29.32 AC
Agricultural |
| <input type="checkbox"/> |  | 2815 Branch Mill Road
Arroyo Grande, CA
9.5 level acres just outside the Village of Arroyo Grande. Currently being used a tomato farm... | \$599,900
9.50 AC
Agricultural |

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Arroyo Grande, CA
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EXHIBIT DD

Boundary and Topo Survey.mpp

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ID	Task Name	Notes	Quan.	Hrs/item (typ)	Staff	Total Cost
1	Boundary and Topographic Survey: JOB# 071030 (PW)	Arroyo Grande Creek Levee Improvement Project	0			\$47,010.00
2	Orientation Meeting Bold	001 Bold	0			\$0.00
3	Project Contingency		0			\$1,500.00
4	Boundary	002	0			\$26,690.00
23	Topographic Survey: QC; Area Details, and contour	035	0			\$12,440.00
36	Management	032	0			\$4,320.00
40	Fees for Preliminary Research and Scope Development	034	0			\$2,060.00

EXHIBIT EE



FUGRO WEST, INC.

660 Clarion Court, Suite A
San Luis Obispo, CA 93401
Tel: (805) 542-0797
Fax: (805) 542-9311

December 20, 2007
Project No. 2007.405

Project Memorandum

To: Jeff Werst, County of San Luis Obispo
From: Jonathan D. Blanchard, Fugro
Subject: **Arroyo Grande – Los Berros Creek Levee**

Jeff,

As we discussed, we have reviewed the project and prepared preliminary (ball park) cost estimates for performing preliminary and design-level geotechnical evaluations for the project. The project would consist of approximately 3.5 miles of creek and about 7 miles of levee. The purpose of the geotechnical evaluation would mainly be to evaluate the condition of the existing levee, its vulnerability to seismic hazards, and provide recommendations for raising the levee by about 2 feet on average. I understand that the budget may be limited to about \$100,000 dollars, so I have tried to explain the basic scope, potential items that could impact costs, and how those may or may not affect the design.

We understand that the project will mainly be designed under County jurisdiction and to their requirements. NRCS may provide a courtesy peer review of the design and geotechnical study. The design flood is a 50-year event.

It would be beneficial to conduct a preliminary geotechnical evaluation for the project, prior to beginning the design. We could likely perform this study at a cost of about \$20,000 to \$30,000. The purpose of the initial study would be to review the existing site conditions and levee, as-built plans from NRCS, any available geotechnical data for the site vicinity (such as Caltrans, NRCS, USGS, etc.); and ideally perform a limited number of cone penetration test (CPT) soundings along the levee to get an initial characterization of the subsurface conditions below the levee and quality of the levee materials encountered. The key items that we would expect to obtain from the initial study are:

1. General subsurface conditions and condition of the existing levee;
2. Vulnerability of the site to seismic hazards such as liquefaction, seismic settlement, lateral spreading, or seismic instability;
3. A preliminary review of the condition of the levee relative to seepage, slope stability and erosion; and
4. Feasibility and associated geotechnical impacts of raising the levee as-planned.



The preliminary geotechnical data and evaluation can then be used to advise the County how this information can impact the levee, assess risk, and get the County's input regarding the importance of various geotechnical issues relative to the goals of the project. This information can then help to develop an approach for the project team to consider geotechnical information or hazards in the design, construction, operation, and maintenance of the facility.

For example, an issue of seismic settlement (perhaps several inches or more) may have little impact regarding the stability of levee, and the likelihood of a seismic event occurring while the levee is containing a flood is likely remote. However, if the settlement results in cracking of a clay levee embankment; seepage paths may develop that could compromise the levee during subsequent flooding. Whether this issue is to be addressed during the design or maintenance of the levee could have a significant impact on the scope of the geotechnical investigation. Having a clear goal as to what items will be addressed by the design or how decisions will be made early in the project can help to streamline and focus the design-level investigation.

The design Geotechnical Report would be prepared following the initial evaluation. The cost of the report would likely be \$75,000 to \$125,000. The lower end of the cost represents a limited field exploration program that would likely only be suitable if there were few geotechnical considerations that would impact the design, or portions of the levee would not require rigorous exploration or analysis to address seismic hazards. The upper end would include explorations (about 40 or more CPT soundings and borings) at about 1,000-foot spacings along both sides of the creek, evaluation of slope stability, seepage, liquefaction, seismic settlement, and lateral spreading and their potential impact on the design. Detailed survey information and base maps would need to be provided by the County for this work. Based on our conversations today, I expect that a suitable design-level report could be prepared for about \$100,000. However, if extensive mitigation of liquefaction is needed, the project will involve ground improvement below the levee, flood walls, geophysical surveys, or alternatives to reduce impacts to environmentally sensitive areas or easement, there could be a need for additional exploration or analysis above the \$125,000 estimate.

The general scope of the design-level report would be to address the stability of the existing and proposed levee; provide recommendations for the design of the levee improvements; provide recommendations for site preparation, grading, finished slope inclinations, and drainage; and address seismic issues relative to improving the stability of the embankment by providing suitable slope inclinations, stability berms, and/or drainage provisions, as needed.

As we discussed, larger levee projects involving higher levees, the Army Corps, LiDAR surveys with Fli-Map, EM geophysical studies (see <http://www.water.ca.gov/levees/> which includes photos of our survey and exploration equipment) can cost \$200,000-\$300,000 per levee mile.

Another point to consider in your budget is inflation that is occurring within the engineering industry (like everything else). I recently read that fees for professional services have been increasing by as much as 10 to 20 percent per year, and we have had similar increases in the last couple of years. The rising costs are mainly attributed to a shortage of civil





engineers within our industry, higher salaries being demanded by entry level personnel, rising premiums for all types of insurance, and a rapid increase the cost of living (homes and vehicles).

I hope this information is helpful in planning your budget and grant application for the project. Enjoy the Holidays and please give me a call if I can be of assistance.

Thanks

Jon



EXHIBIT FF

SAN LUIS OBISPO COUNTY
PUBLIC WORKS DEPARTMENT
BONDING ESTIMATE - COUNTY APPROVED UNIT COSTS

PRICE INDEX BASELINE PER 2008 CALTRANS INDEX = 252.70
CURRENT PRICE INDEX 252.70

DIFFERENCE 100.00%

ITEM	TYPE	UNIT COST	UNIT	MINIMUM	QUANTITY	TOTAL
SITE PREPARATION: SEC. 2-1						
CLEARING AND GRUBBING		\$0.03	SF			\$0
TREE REMOVAL		\$300.00	EA			\$0
A.C. REMOVAL		\$1.70	SF			\$0
CONCRETE REMOVAL	S.W.	\$3.25	SF			\$0
CONCRETE REMOVAL	C & G	\$10.00	LF			\$0
GRIND A.C.		\$1.70	SF	\$4,250		\$0
DISPOSAL OF A.C.		\$50.00	CY	\$360		\$0
OTHER REMOVAL (SPECIFY)						\$0
ABANDON WELL		\$1,650.00	EA			\$0
ABANDON SEPTIC SYSTEM		\$500.00	EA			\$0
DISPOSAL OF CLIII BASE		\$29.00	CY	\$360		\$0
CUT & FILL	0-1000 CY	\$22.00	CY	\$500		\$0
	1000-20000 CY	\$15.00	CY			\$0
	> 20000 CY	\$9.00	CY			\$0
IMPORT	0-1000 CY	\$31.00	CY	\$500		\$0
	1000-20000 CY	\$22.00	CY			\$0
	> 20000 CY	\$12.00	CY			\$0
FINE GRADING		\$0.30	SF			\$0
TOTAL						\$0

ROADWAYS: SEC. 3-1				TYPE	UNIT COST	UNIT	MINIMUM	QUANTITY	TOTAL
A.C. PAVEMENT IN PLACE	2"				\$1.95	SF	\$800		\$0
A.C. PAVEMENT IN PLACE	3"				\$2.90	SF	\$800		\$0
A.C. PAVEMENT IN PLACE	4"				\$3.70	SF	\$800		\$0
A.C. PAVEMENT IN PLACE	5"				\$4.90	SF	\$800		\$0
A.C. PAVEMENT IN PLACE	6"				\$5.60	SF	\$800		\$0
A.C. PAVEMENT IN PLACE					\$135	TON	\$800		\$0
CLASS II AGG. BASE	4"				\$0.87	SF			\$0
CLASS II AGG. BASE	6"				\$1.30	SF			\$0
CLASS II AGG. BASE	8"				\$1.75	SF			\$0
CLASS II AGG. BASE	10"				\$2.10	SF			\$0
CLASS II AGG. BASE	12"				\$2.50	SF			\$0
CLASS II AGG. BASE	18"				\$3.70	SF			\$0
CLASS II AGG. BASE					\$35.00	TON			\$0
CROSS GUTTER AND SPANDREL	D-5				\$17.00	SF			\$0
GEOTEXTLE FABRIC					\$1.00	SF			\$0
SEAL COAT/SLURRY SEAL					\$0.60	SF			\$0
CHIP SEAL					\$2.00	SF			\$0
SAW CUT	CONCRETE				\$4.00	LF	\$250		\$0
SAW CUT	A.C.				\$2.17	LF	\$250		\$0
TOTAL									\$0

ROAD EDGES: SEC. 4-1				TYPE	UNIT COST	UNIT	MINIMUM	QUANTITY	TOTAL
DRIVEWAY APPROACH		(B-2,3)			\$9.00	SF			\$0
DRIVEWAY APPROACH		A.C. (B-1)			\$5.50	SF			\$0
HANDICAP RAMP		C-5			\$13.00	SF			\$0
CURB AND GUTTER		6" (C-2)			\$22.00	LF			\$0
CURB ONLY		C-2A			\$16.00	LF			\$0
A.C. DIKE		C-3			\$10.00	LF	\$800		\$0
SIDEWALK		C-4			\$10.00	SF			\$0
GUARDRAIL					\$40.00	LF			\$0
STREET TREE WELL		M-5			\$700.00	EA			\$0
D.G. WALKWAY					\$1.50	SF	\$625		\$0
TOTAL									\$0

STORM DRAIN: SEC. 5-1					UNIT COST	UNIT	MINIMUM	QUANTITY	TOTAL
CURB INLET		D-2			\$3,900	EA			\$0
RURAL INLET		D-2A,B			\$1,700	EA			\$0
CULVERT PIPE		15"			\$38.00	LF			\$0
CULVERT PIPE		18"			\$60.00	LF			\$0
CULVERT PIPE		24"			\$80.00	LF			\$0
CULVERT PIPE		30"			\$90.00	LF			\$0
CULVERT PIPE		36"			\$105.00	LF			\$0
CULVERT PIPE		48"			\$135.00	LF			\$0
CULVERT PIPE		60"			\$150.00	LF			\$0
HEADWALL (CALTRANS D89)		15"-36" PIPE			\$3,420.00	EA			\$0
HEADWALL -WING TYPE (D89)		18"-60"			\$4,800.00	EA			\$0
UNDERDRAIN (SIDEWALK)		D-4A, D-4B			\$1,500.00	EA			\$0
UNDERDRAIN (SIDEWALK)		PIPE D-4			\$500.00	EA			\$0
RIP-RAP DISSIPATOR		0.25 TON, H-5			\$150.00	CY			\$0
RIP-RAP DISSIPATOR		0.5 TON, H-5			\$160.00	CY			\$0
RIP-RAP DISSIPATOR		1 TON, H-5			\$170.00	CY			\$0
RIP-RAP DISSIPATOR		2 TON, H-5			\$180.00	CY			\$0
OVERSIDE DRAIN, (CALTRANS)		A.C.			\$320.00	EA			\$0
CONCRETE V-DITCH (SLOPE)					\$40.00	LF			\$0
MANHOLE		D-3 8' DEPTH			\$4,500	EA			\$0
TIE TO EX. MANHOLE					\$2,000	EA			\$0
UNDERGROUND BASIN		STORMTECH			\$8.00	CF	\$500		\$0
TOTAL									\$0

WATER SUPPLY: SEC. 6-1				TYPE	UNIT COST	UNIT	MINIMUM	QUANTITY	TOTAL
WATER METER, LATERAL, BOX		W-4			\$1,700.00	EA			\$0
RAISE WATER METER					\$400.00	EA			\$0
WATER MAIN		6"			\$50.00	LF			\$0
WATER MAIN		8"			\$58.00	LF			\$0
WATER MAIN		10"			\$68.00	LF			\$0
WATER MAIN		12"			\$92.00	LF			\$0
WATER MAIN		14"			\$106.00	LF			\$0
WATER MAIN		16"			\$120.00	LF			\$0
HOT TAP		6"			\$1,998.00	EA			\$0
HOT TAP		8"			\$2,238.00	EA			\$0
HOT TAP		10"			\$3,219.00	EA			\$0
GATE VALVE		4"			\$675.00	EA			\$0
GATE VALVE		6"			\$1,171.00	EA			\$0
GATE VALVE		8"			\$2,056.00	EA			\$0
FIRE HYDRANT		W-2			\$4,800.00	EA			\$0
RELOCATE FIRE HYDRANT					\$2,280.00	EA			\$0
BLOWOFF ASSEMBLY		W-5			\$2,000.00	EA			\$0
AIR RELIEF VALVE		W-6 1"			\$1,550.00	EA			\$0
AIR RELIEF VALVE		W-6 2"			\$2,370.00	EA			\$0
AIR RELIEF VALVE		W-6 4"			\$5,285.00	EA			\$0
WATER SAMPLING STATION		W-7			\$1,250.00	EA			\$0
THRUST BLOCKS		W-1 6"			\$275.00	EA			\$0
THRUST BLOCKS		W-1 8"			\$385.00	EA			\$0
THRUST BLOCKS		W-1 10"			\$484.00	EA			\$0
THRUST BLOCKS		W-1 12"			\$714.00	EA			\$0
STEEL WATER TANK		WELDED			\$1.50	PER GAL			\$0
STEEL WATER TANK		BOLTED			\$1.00	PER GAL			\$0
								TOTAL	\$0

WASTEWATER DISPOSAL: SEC. 7-1						MINIMUM		QUANTITY		TOTAL
	TYPE	UNIT COST	UNIT							
SEWER LATERAL, TIE IN	S-3	\$1,350.00	EA							\$0
SEWER LATERAL, TIE IN STEEP	S-3a	\$1,600.00	EA							\$0
SEWER CLEANOUT	S-2	\$1,500.00	EA							\$0
SEWER MAIN (BACKFILL TYPE)	6" NATIVE	\$35.00	LF							\$0
SEWER MAIN (BACKFILL TYPE)	8" NATIVE	\$50.00	LF							\$0
SEWER MAIN (BACKFILL TYPE)	6" IMPORT	\$40.00	LF							\$0
SEWER MAIN (BACKFILL TYPE)	8" IMPORT	\$60.00	LF							\$0
SEWER MAIN (BACKFILL TYPE)	12" IMPORT	\$75.00	LF							\$0
SLURRY BACKFILL		\$19.00	LF							\$0
MANHOLE	TYPICAL (S-1)	\$4,500.00	EA							\$0
MANHOLE	DROP (S-1A)	\$5,400.00	EA							\$0
TIE TO EXISTING MANHOLE		\$2,000.00	EA							\$0
FORCE MAIN	4" OR LESS	\$40.00	LF							\$0
ADJUST MANHOLE COVER		\$535.00	EA							\$0
TOTAL										\$0

UTILITIES: SEC. 8-1		TYPE	UNIT COST	UNIT	MINIMUM	QUANTITY	TOTAL
JOINT TRENCH		P-4	\$40.00	LF			\$0
GAS TRENCH			\$24.00	LF			\$0
GAS METER			\$400.00	EA			\$0
PIPE JACKING (BORING)		6" PIPE OR LESS	\$120.00	LF			\$0
SERVICE POLE		RELOCATE	\$1,000.00	EA			\$0
TELEPHONE POLE		RELOCATE	\$2,500.00	EA			\$0
ELECTRIC POLE		RELOCATE	\$6,000.00	EA			\$0
JUNCTION POLE		RELOCATE	\$9,000.00	EA			\$0
UNDERGROUND + JP		RELOCATE	\$15,000.00	EA			\$0
INSTALL SIDEWALK GUY			\$1,300.00	EA			\$0
STREET LIGHTS			\$5,000.00	EA			\$0
GUY ANCHOR ONLY		RELOCATE	\$1,800.00	EA			\$0
GUY POLE AND ANCHOR		RELOCATE	\$3,100.00	EA			\$0
						TOTAL	\$0

TRAFFIC CONTROL: SEC. 9-1						TOTAL	
	TYPE	UNIT COST	UNIT	MINIMUM	QUANTITY		
TRAFFIC STRIPING	THERMOPLASTIC	\$9.00	SF	BULK			\$0
TRAFFIC STRIPING	PAINT	\$0.60	LF				\$0
TRAFFIC STRIPING	THERMOPLASTIC	\$2.70	LF				\$0
REMOVE STRIPING		\$3.00	LF				\$0
TRAFFIC MARKING		\$1.25	SF				\$0
STOP + STREET NAME SIGNS	M-4	\$600.00	EA				\$0
STREET NAME SIGN ONLY	M-4	\$300.00	EA				\$0
BARRICADE	METAL (M-2)	\$80.00	LF				\$0
BARRICADE	WOOD (M-2A)	\$80.00	LF				\$0
MARKERS AND DELINEATORS		\$9.00	LF				\$0
CONSTRUCTION AREA SIGNS		\$400.00	EA				\$0
TRAFFIC CONTROL	% OF IMPV.	3%	EA				\$0
						TOTAL	\$0

MISCELLANEOUS						TOTAL	
	TYPE	UNIT COST	UNIT	MINIMUM	QUANTITY		
CHAIN LINK FENCE	6' NEW	\$35.00	LF				\$0
OTHER FENCE			LF				\$0
GATE		\$721.00	EA				\$0
LANDSCAPE AND IRRIGATION		\$2.00	SF	\$500			\$0
MONUMENT WELLS	M-1, M-1A	\$700.00	EA				\$0
RETAINING WALLS	CMU/POURED	\$38.00	SF (FACE WALL)				\$0
RETAINING WALLS	GRAVITY	\$28.00	SF (FACE WALL)				\$0
						TOTAL	\$0

EROSION CONTROL: SEC. 1.1.2.J & APP.B						UNIT	MINIMUM	QUANTITY	TOTAL
SAND OR GRAVEL BAG						EA			\$0
JUTE MAT						SF			\$0
STRAW MAT						SF			\$0
STRAW BALE BARRIER						LF			\$0
STRAW BALE INLET BARRIER						LF			\$0
SILT FENCE						LF			\$0
FIBER ROLLS						LF			\$0
FIBER MAT						SF			\$0
HYDROSEED						SF			\$0
TOTAL									\$0

SUBTOTAL	\$0.00
CONTINGENCY (10%)	\$0.00
INFLATION (10%)	\$0.00
ADMINISTRATION (20%-40%)	\$0.00
BOND AMOUNT TO BE POSTED	\$0

EXHIBIT GG

TABLE 2
Cost Estimate Summary

Task		Total
1	Project Management	\$ 23,700
2	Notice of Preparation - EIR	\$ 4,800
3	Public Scoping Meeting	\$ 3,900
4	Agency Consultation	\$ 17,500
5	Admin Draft EIR	\$ 57,840
6	Draft EIR	\$ 17,000
7.1	Admin Final EIR	\$ 10,800
7.2	Findings	\$ 4,200
8	Final EIR	\$ 10,030
9	Public Hearing	\$ 3,400
10	Special-status Plant Surveys	\$ 16,400
11	Cultural Resources - Phase 1	\$ 12,043
12	Cultural Resources - Section 106*	\$ 15,000
13.1	Hazardous Materials - Phase 1 ESA*	\$ 13,200
13.2	Hazardous Materials – NOA*	\$ 17,720
14	(NOA Mitigation Workplan - optional)*	\$ 3,520
15	Biological Assessment for CRLF, tidewater goby	\$ 12,500
16	Wetland Assessment	\$ 20,058
17	Environmental Assessment - EA (NEPA)	\$ 12,920
18	Permitting - WMP, Sediment Removal. Program levee	\$ 29,500
19	Swanson – WMP (Attachment A) *	\$ 203,940
TOTAL		\$509,971

* includes 10% markup on subconsultant charges

EXHIBIT HH

County of San Luis Obispo
Public Works Department

PROJECT MANAGEMENT MANUAL



JUNE 2003

**MARK-UPS FOR OTHER DIRECT PROJECT COSTS
FOR COUNTY OF SAN LUIS OBISPO PUBLIC WORKS PROJECTS²**

Preliminary engineering, traffic studies, and community outreach For paving and slurry seal projects	1% 10%
Project management	5%
Environmental studies and permits	2%
Environmental monitors	5%
Mitigation	3%
Design for paving and slurry seal projects For roadway projects <\$50,000 For roadway projects \$50-100,000 For roadway projects >\$100,000 For bridge projects <\$150,000 For bridge projects >\$150,000 For utility projects	7% 25% 20% 15% 25% 20% 20%
Right-of-way Be sure to include appraisal and staff coordination costs	0-5%
Flagging Costs ³	No. of work days times \$500/day
Storm Water Prevention Plan	5%
Contract Administration for paving and slurry seal projects For roadway projects <\$50,000 For roadway projects \$50-200,000 For roadway projects >\$200,000 For bridge projects <\$150,000 For bridge projects >\$150,000 For utility projects <\$150,000 For utility projects >\$150,000	7% 25% 20% 15% 25% 17% 20% 18%
Overhead, administration, and auditor costs	17%
Finance Costs	See below
TOTAL OTHER COST MARK-UP	52 TO 102%

² These are guidelines only. Use your judgment in assessing the applicability of these or any other project cost estimate tools. Amounts stated are percentages of the estimated construction cost. Increase by 20% cost categories that are to be provided by consultants.

³ This department typically issues the "1st change order" cost for flagging. Flagging costs are borne equally between the Contractor and the County so that we retain control over how much flagging is needed.

EXHIBIT II

County of San Luis Obispo
Public Works Department

PROJECT MANAGEMENT MANUAL



JUNE 2003

Construction cost estimating

Project managers have several resources for estimating construction costs. You are encouraged to consult several of these resources and examine the range of possible cost before establishing an initial cost estimate:

- Consultation with Project Design Engineer (consultant or in-house)
- Caltrans Cost Estimating Book located in the Design Division library.
- Dodge Construction Cost Estimating Catalog located In the Design Division library.
- Bid summaries for prior similar County projects located in the Design Division library.¹
- Contact other public agencies who have performed similar work

You are advised to add an adjustment factor for unforeseen conditions. The adjustment factor should be applied to the construction cost estimate including contingency, flagging and supplemental work. The amount of the adjustment factor should be high (50% or higher) for initial cost estimates. This percentage will be reduced as the design progresses, i.e. +50% at preliminary stage, +25% at 50% completion, and +10% at 90% completion.

All construction cost estimates should be accompanied by the ENR index current as of the date of preparation. Use the 20 Cities Construction Cost Index for County projects (for example, the construction cost index is 6693.94 for 2nd quarter 2003). ENR indices can be accessed by referring to the ENR magazine or at *enr.com*. This index is useful in updating cost estimates by applying the increase in the cost index to previously constructed projects. Engineering judgment must be used when using the ENR cost index which is based on steel, concrete, wood and labor costs from single sources from 20 cities around the country.

¹ As of 2002, these bid tabulations are not accessible through a data base. You must browse the library and seek out similar individual projects.

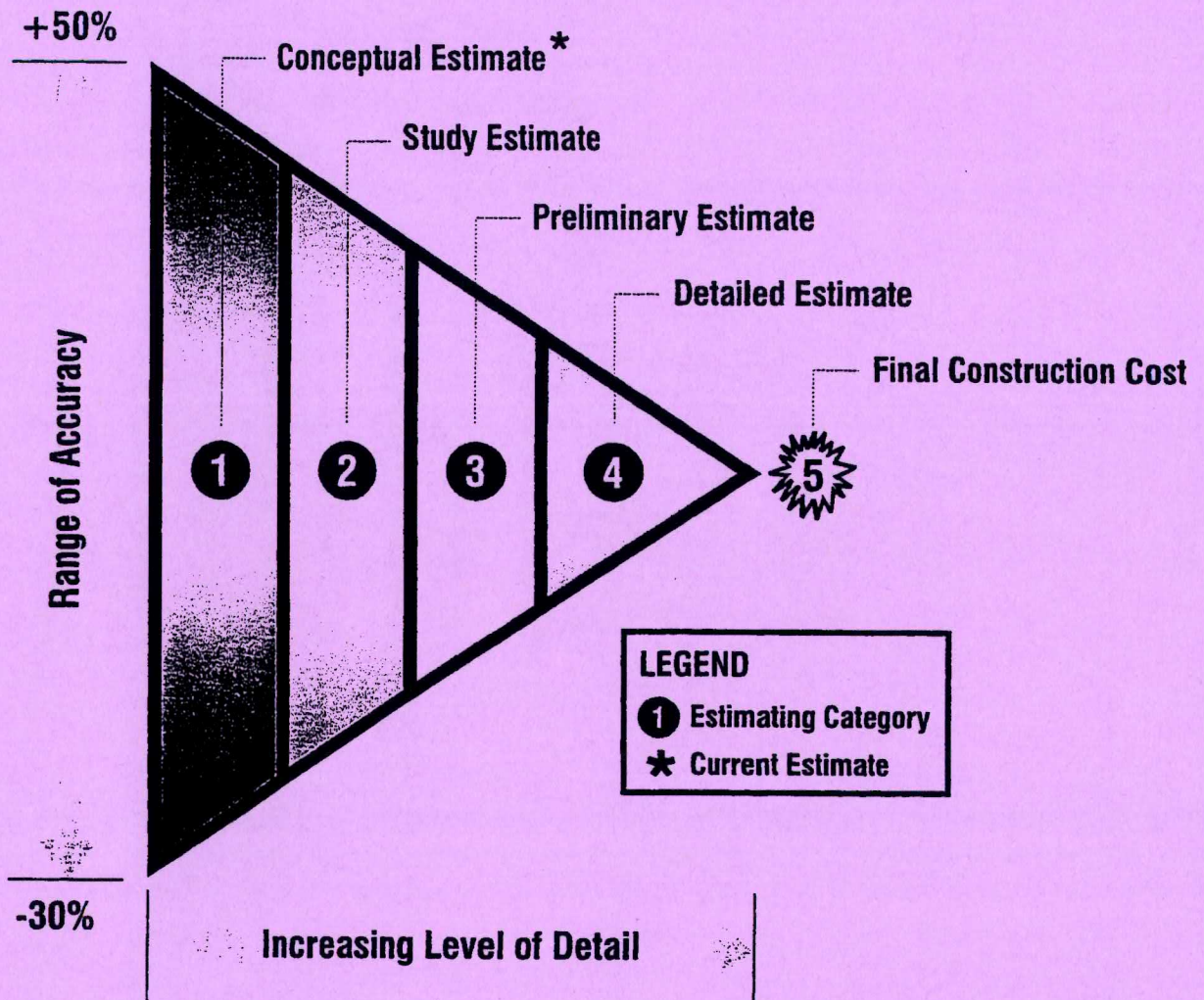


Figure 11.1
COSTS ESTIMATE
TRIANGLE OF ACCURACY
NACIMIENTO PROJECT
SAN LUIS OBISPO COUNTY

EXHIBIT VV



Sound Science. Creative Solutions.™

3033 N. Central Avenue, Suite 145
Phoenix, AZ 85012

Remit to:
P.O. Box 92170
Elk Grove, IL 60009

P 602.274.3831
F 602.274.3958

Invoice

Invoice No :	14414-004
Date :	October 15, 2008
Contract Maximum :	\$509,971.00
Total To Date:	\$97,064.22
Prev Billing Amount:	\$53,447.46
Invoice Amount:	\$43,616.76
Period Ending:	09/27/2008

To: County of San Luis
County Government Center - Room 207
Department of Public Works
San Luis Obispo CA 93408
Attention: John Farhar

Project : 14414. - AG Creek Waterway Management Program & EIR

Manager: Deborah Hollowell

Particulars	Current Billing
RE: AG Creek Waterway Management Program & EIR	
Services for period ending 2008-SEP-27	
AG Creek Waterway Management Program & EIR	
Task 1 - Project Management	
Professional Services	
Mary B Reents -Project Director 0.25HR @ \$150.00 / HR = \$37.50	
Deborah A Hollowell -Mapping Coordinator / Planner 14.00HR @ \$105.00 / HR = \$1,470.00	
Total: Professional Services	1,507.50
Total: Task 1 - Project Management	1,507.50
Task 2 - Notice of Preparation	
Professional Services	
Deborah A Hollowell -Mapping Coordinator / Planner 2.50HR @ \$105.00 / HR = \$262.50	
Julie-Marie Jones -Planning Specialist II 2.50HR @ \$65.00 / HR = \$162.50	
Total: Professional Services	425.00
Total: Task 2 - Notice of Preparation	425.00
Task 3 - Public Scoping Meeting	
Professional Services	
Julie-Marie Jones -Planning Specialist II 1.00HR @ \$65.00 / HR = \$65.00	
Total: Professional Services	65.00
Total: Task 3 - Public Scoping Meeting	65.00
Task 4 - Agency Consultation	
Professional Services	
Deborah A Hollowell -Mapping Coordinator / Planner 0.50HR @ \$105.00 / HR = \$52.50	
Total: Professional Services	52.50
Total: Task 4 - Agency Consultation	52.50
Task 5 - Admin Draft EIR	

DOC #
DEPT
DATE
APPROVED
See pg 3



ENVIRONMENTAL CONSULTANTS

Sound Science. Creative Solutions.™

3033 N. Central Avenue, Suite 145
Phoenix, AZ 85012Remit to:
P.O. Box 92170
Elk Grove, IL 60009P 602.274.3831
F 602.274.3958

Invoice

Invoice No : **14414-004**

Date : October 15, 2008

Contract Maximum : \$509,971.00

Total To Date: \$97,064.22

Prev Billing Amount: \$53,447.46

Invoice Amount: \$43,616.76

Period Ending: 09/27/2008

To: County of San Luis
County Government Center - Room 207
Department of Public Works
San Luis Obispo CA 93408
Attention: John Farhar**Project : 14414. - AG Creek Waterway Management Program & EIR****Manager:** Deborah Hollowell

Particulars	Current Billing
Professional Services	
Deborah A Hollowell -Mapping Coordinator / Planner 14.25HR @ \$105.00 / HR = \$1,496.25	
Keith L Miller -Senior Planner / Project Manager 2.00HR @ \$105.00 / HR = \$210.00	
Total: Professional Services	1,706.25
Total: Task 5 - Admin Draft EIR	1,706.25
Task 10- Plant Surveys	
Professional Services	
Robert L Sloan -Senior Biologist 12.50HR @ \$115.00 / HR = \$1,437.50	
Deborah A Hollowell -Mapping Coordinator / Planner 2.00HR @ \$105.00 / HR = \$210.00	
Seth T Sutherland -GIS Specialist 4.00HR @ \$105.00 / HR = \$420.00	
Jon M Claxton -Environmental Specialist V 12.00HR @ \$95.00 / HR = \$1,140.00	
Robert B Holland -Biologist 10.50HR @ \$75.00 / HR = \$787.50	
Total: Professional Services	3,995.00
Total: Task 10 - Plant Surveys	3,995.00
Task 11 - Cultural - Phase 1	
Professional Services	
Cindy J. Arrington -Subject Matter Expert XI 0.50HR @ \$165.00 / HR = \$82.50	
Total: Professional Services	82.50
Total: Task 11 - Cultural - Phase 1	82.50
Task 13.1 - Phase I ESA	
Kleinfelder \$1,068.50 plus 10% markup - Services thru Aug. 10, 2008	6,711.65
Kleinfelder \$5,033.00 plus 10% markup - Services thru Sept. 7, 2008	
Total: Task 13.1 - Phase I ESA	6,711.65
Task 16 - Wetland Assessment	
Professional Services	



ENVIRONMENTAL CONSULTANTS

Sound Science. Creative Solutions.™

3033 N. Central Avenue, Suite 145
Phoenix, AZ 85012

Remit to:
P.O. Box 92170
Elk Grove, IL 60009

P 602.274.3831
F 602.274.3958

Invoice

Invoice No :

14414-004

Date :

October 15, 2008

Contract Maximum :

\$509,971.00

Total To Date:

\$97,064.22

Prev Billing Amount:

\$53,447.46

Invoice Amount:

\$43,616.76

Period Ending:

09/27/2008

To: County of San Luis

County Government Center - Room 207

Department of Public Works

San Luis Obispo CA 93408

Attention: John Farhar

Project : 14414. - AG Creek Waterway Management Program &
EIR

Manager: Deborah Hollowell

Particulars	Current Billing
Deborah A Hollowell -Mapping Coordinator / Planner 3.50HR @ \$105.00 / HR = \$367.50	
Jon M Claxton -Environmental Specialist V 13.00HR @ \$95.00 / HR = \$1,235.00	
Total: Professional Services	1,602.50
Total: Task 16 - Wetland Assessment	1,602.50
Task 19 - Waterway Management Plan	
Swanson H & G \$24,921.51 plus 10% markup - Services thru Aug. 31, 2008	27,413.66
Expenses	
Materials and Supplies	55.20
Total: Expenses	55.20
Total: Task 19 - Waterway Management Plan	27,468.86
Total: AG Creek Waterway Management Program & EIR	43,616.76
TOTAL	43,616.76

SIGN HERE

COUNTY DEPT OF PUBLIC WORKS
MATERIALS RECORD
Received in good condition

Signature _____
Date Rec'd _____

ACCOUNT CODES

OBJECT # 452R 208632	PO # 25804387
-------------------------	------------------

DOC # _____
DEPT _____
DATE _____
APPROVAL _____

EXHIBIT WW

ABSTRACT OF BIDS

SUBJECT:

AG Creek Channel

BID NO:

3493-10

OPENING:

6-8-10

VENDOR	KD JANNI	VANDER OUDEN	RAMEY'S	NATURE'S IMAGE	GREENTREE SERVICE	
TERMS						
FOB						
ACCEPTANCE						

	UNIT PRICE	UNIT PRICE	UNIT PRICE	UNIT PRICE	UNIT PRICE	UNIT PRICE
1 TOTAL	\$38,311.-	\$19,425.-	\$130,000.-	\$119,790. ⁵⁰	\$59,800. ⁰⁰	
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						

Bid price averaged
over 30 acres is
approximately
\$4,000 per acre